

# ABE/LINK MALAWI TEACHER PROFESSIONAL DEVELOPMENT SUPPORT

## NATIONAL PRIMARY CURRICULUM MONITORING AND EVALUATION

### TRAINING MANUAL

DECEMBER, 2011

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## ABE/LINK Malawi Teacher Professional Development Support (MTPDS)

National Primary Curriculum

Monitoring and Evaluation

Training Manual for Trainers and Data Collectors

December, 2011

Submitted by: Creative Associates International, RTI and Seward Inc.

#### under

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#### Disclaimer

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#### Acronyms

ESIP	Education Sector Implementation Plan
M&E	Monitoring and Evaluation
MGDS	Malawi Growth and Development Strategy
MoEST	Ministry of Education Science and Technology
MTPDS	Malawi Teacher Professional Development Support Program
NESP	National Education Sector Plan
NPC	National Primary Curriculum
NSCP	National Strategy for Community Participation
PCAR	Primary Curriculum Assessment Review
PTA	Parents- Teachers Association
SMC	School Management Committee

#### **WELCOME SESSION (30 Minutes)**

#### FACILITATOR WELCOMES PARTICIPANTS

- Welcomes PEAs, MOEST officials and MTPDS staff
- Introduces the audience to the very important task that they have been invited to participate in
- Describes the MOEST efforts to develop the NPC M&E Framework and the implementation strategy for monitoring the NPC
- Informs audience that this is the first annual NPC M&E data collection activity
- Informs audience of the critical importance of their job to improving education in Malawi and to Malawi's learners
- Informs PEAs that in participating in this activity the PEA becomes a researcher who is tasked with investigating the success and progress of the Nation in implementing the NPC

#### MOEST OFFICIALS WELCOME PARTICIPANTS

Each attending MOEST Senior Director is invited to provide an opening remark

#### > FACILITATOR BRIEFLY DESCRIBES THE NATURE OF THE TRAINING

- The training will prepare each PEA to implement the NPC Data Collection activity in 1-2 schools and will be doing so over the course of 3 days to take place over the course of 3 days in February
- Each of you is likely to be working in alone in the field
- It is therefore critical that all PEAs develop the skills and confidence you need in this 3-day training.
- We have set up a learning environment that is designed to help you achieve this goal.
- We will be working in small groups throughout the program
- We will also provide hands-on experience in the schools
- We will need you to be very open about your learning and appeal to you to tell us when you do not understand something
- Since this is the first time national NPC M&E data collection activity, we also appeal to you to
  assist us in improving the data collection tools and procedures so that they will be closely
  aligned with the school context

#### FACILITATOR CONCLUDES TRANSITIONS TO THE FIRST TRAINING SESSION

Appeals to the PEAs to actively engage in each activity to ensure:

- PEAs become the "experts" in implementing the NPC M&E Strategy
- PEAs assist the M&E Team to make sure that we learn about improvements that are needed in the instruments and make sure we modify them based on your important feedback

#### > TIMEKEEPER INTRODUCES THE USE OF DYNAMIC CHANGING GROUPS

#### **SESSION 1: Introduction to Monitoring and Evaluation (1 Hour)**

#### **General Introduction (15 Minutes)**

Before embarking on specific NPC M&E data collection training, we would like to learn a little from you about your past experience and knowledge about monitoring and evaluation (M&E) in general. In this section we will also introduce to three important concepts: the idea of shared responsibility in M&E; validity; and reliability.

#### **Materials needed**

- NPC M&E Framework
- Pens
- Manila sheets of paper
- Projector

#### **Learning outcomes**

At the end of the topic participants will:-

- Have a deep sense of responsibility for quality monitoring in schools
- Understand the meaning of "valid measurements"
- Understand the meaning of "reliable measurements"

#### Facilitator discusses *shared responsibility* in education monitoring and evaluation

Describes the multiple roles and players in education monitoring (e.g., managers, PEAs, head teachers, teachers, learners, parents and community members)

#### Facilitator introduces the concepts of validity and reliability

**VALIDITY** is related to the accuracy and appropriateness of the data that is collected. When data is valid we can be assured that the data is accurate, represents the "truth" and is not "biased" by, for example, the opinions of the data collector or the fears or concerns of disclosure by the respondent. In order to be valid data it must also reflect the information that the data collection tool was intended to generate. For example, if a questionnaire item is designed to collect information on the **quality** of training — an attempt to learn how well the training was conducted or how much the participant learned - it is not appropriate to report information about the number of trainings attended or type of training — like the subject matter - on that particular Questionnaire item. If the information collected is not the aligned with the type of information intended then the data is not valid.

Sometimes the way the Questionnaire item is worded makes it difficult for the data collector to understand what they are supposed to collect. In this situation the validity is weakened because the questionnaire is not well constructed. It is ambiguous.

Thus in this training we are reaching out to you PEAs to report to us when the form elements or questionnaire items are not clear. We also ask that you, during your small group meetings, help to resolve problems and improve clarity. This will help to strengthen both the **validity** and **reliability** of the NPC M&E Instruments.

**RELIABILITY** is related to the standardization of data collection and recording.

When there is strong reliability - we expect the same data to be collected and recorded by different interviewers or data collectors who are using the same tools (e.g., form, questionnaire, interview guide - administered to the same informants, etc.). This means that there are high levels of agreement in collecting information or scoring observations by multiple administrators using the same tools. It will be very important in this training to work together to achieve high inter-rater agreement in some of our work this week, especially the classroom observation tool.

When there is strong reliability – we expect the data collected and recorded to be the same if one data collector administers a tool or other instrument repeatedly, thus the instrument yields stable or consistent results when administered on two or more occasions (with the same informant or observation situation) or by different data collectors. An example is the situation where a videotaped recording is scored by one or more observers on multiple occasions. If the instrument has strong reliability, we expect the ratings to be the same, either by the same observer on multiple occasions or by different observers. In this training you will have an opportunity to develop your skills in rating the instructional practices of teachers presenting a lesson in a classroom and you will learn more about inter-rater reliability.

The standardization of procedures for collecting data, rating classrooms and administering interviews is the underpinning factor in achieving high levels of reliability. Thus this training will provide the opportunities for participants to practice and develop the skills for administering the NPC M&E Tools in a standard, consistent fashion to ensure that the data is both *valid* and *reliable*.

#### M&E Activity (30 Minutes)

- Group leaders request that participants give an example of ways they currently monitor school quality in their job and how they use monitoring information
  - Participants discuss their interpretation of "shared responsibility"
- Group leaders review definitions and examples (above) validity and reliability
- Participants are asked to give an example of strong and weak validity in data collection.
- Participants will be asked to give an example of strong and weak reliability in data collection
- Group leaders will be assured that all participants develop an applied understanding of validity and reliability

**Debrief M&E Activity:** Facilitator requests *specific group leaders* to share key points of discussions from Activity 4 (School Materials Form) (10 minutes)

Conclusion – Facilitator closes SESSION 1, transitions to SESSION 2, turns over to Timekeeper (2 Min)

Group Dynamics: Timekeeper leads the "World Café" as part of transition to SESSION 2 (3 Minutes)

#### SESSION 2: Importance of the NPC M&E Framework (2 Hours)

#### **Introduction to Section (10 Minutes)**

In Session 1 we began with a brief opportunity to discuss the importance of monitoring and evaluation and your particular experiences in monitoring schools and evaluating performance.

In this topic, you will be introduced to the broad national goal for primary education, the National Education Sector Plan (NESP), Education Sector Implementation Plan (ESIP), goals and objectives of National Primary Curriculum Assessment and Reform (PCAR) M&E.

#### **Materials needed**

- The Malawi Growth and Development Strategy(MGDS, extracts)
- The National Education Sector Plan (extracts)
- The Education Sector Implementation Plan (extracts)
- Pens and manila sheets of paper
- Projector

Facilitator introduces each of these policy documents, referencing the extracts that participants received on arrival.

#### **Learning outcomes**

By the end of this topic, participants will be able to:

- State the broad national themes/goals for primary education as outlined in the National Education Sector Plan and Education Sector Implementation Plan
- Understand the relevance of the NPC M&E Framework to the NESP and ESIP

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#### **POLICY GOALS**

Facilitator introduces the 3 themes of the major education policy documents (5 minutes)

- 1. Quality and Relevance
- 2. Access and Equity
- 3. Governance and Management

#### Activity 1.A: Quality and Relevance (10 Minutes)

- Group leader introduces Goal 1: Quality and Relevance
- Participants describe their role in advancing the Quality and Relevance Goal
- Put responses on manila sheet

**Group Dynamics:** Dr. Randolph leads the World Café activity (2 minutes)

#### Activity 1.B: Access and Equity (10 Minutes)

- Group leader introduces Goal 1: Access and Equity
- Participants describe their role in advancing the Access and Equity Goal
- Put responses on manila sheet

Group Dynamics: Timekeeper briefly leads the World Café activity (2 minutes)

#### **Activity 1.C:** Governance and Management (10 Minutes)

- Group leader introduces Goal 1: Governance and Management
- Participants describe their role in advancing the Governance and Management Goal
- Put responses on manila sheet

**Debrief for POLICY GOAL Activity** Facilitator *invites participants to volunteer* key points of discussion from Activity 1-3 "Popcorn Style" (10 minutes)

**Conclusion for Activity 1:** Facilitator closes the Policy Goals Activity and transitions to M&E Framework Activities (2 & 3), turning over to Timekeeper (2minutes)

**Group Dynamics:** Timekeeper leads the "World Café" one more time, transitions to Activity 2 and Activity 3, informing participants that they will stay in the same groups for these activities (2 minutes)

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#### NPC M&E FRAMEWORK

Facilitator introduces the NPC/PCAR M&E Framework (10 Minutes)

#### Activity 2: M&E Framework - Focus on Indicators (15 Minutes)

- Group Leader introduces the role of an indicator in M&E
- Participants discuss each indicator
- Participants are asked how they would measure this indicator

#### Activity 3: M&E Framework - Focus on Linkages with National Policy (15 minutes)

- Group Leader Introduces some of the following questions for participants to discuss
- How does the NPC/PCAR M&E support the NESP and ESIP
- What is your particular role in advancing the NESP and ESIP, including but not only your role in the NPC/PCAR M&E?

**Debrief for M&E Activity:** Facilitator *invites participants to volunteer* key points of discussion from Activity 1-3 "Popcorn Style" (10 minutes)

**Conclusion** – Facilitator closes session by reinforcing the important role of the participants in implementing the NPC M&E Implementation Strategy through collecting the National M&E data ' (2 minutes)

Group Dynamics: Dr. Randolph leads the "World Café" in transition to SESSION 2 (5 Minutes)

#### **SESSION 3: Understanding and Administering Questionnaires (4 Hours)**

#### **Introduction (10 Minutes)**

Facilitator introduces the activity and the focus – which is to work through each of eight data collection forms.

Facilitator impresses upon the participants: 1) value of the exercise and 2) the importance of having standardized data collection, recording, and summarizing processes (10 minutes)

#### 1. Value

Each monitoring instrument in the NPC M&E Implementation Strategy focuses on measuring performance on a specific indicator given in the NPC M&E Framework (discussed above in Session 2). Collecting and analyzing the NPC M&E data from a representative sample of primary schools:

- Informs the MOEST on the success of the nation in implementing the NPC
- Provides the MOEST with important quantitative and qualitative and information to guide the improvement of inputs to further advance the successful implementation of the NPC and PCAR
- Provides the data needed to track school performance in implementing the NPC across time and to measure the long term impact of the inputs provided

#### 2. Standardization

In order for the information generated from the monitoring process to be valid and reliable, it is imperative that the "data collector" (i.e., the PEA in this situation):

- Understands and appreciates the nature of information which each question or item in the questionnaire is trying to capture
- Collects the data in a systematic, standard fashion
- Records and summarizes information in a systematic, standard fashion

#### **Learning outcomes**

By the end of the topic participants will be able to:

- Understand objectives of each of the questionnaires
- Understand the questions/items in the questionnaires
- Administer and score the guestionnaires in a standard fashion
- Encode data on the questionnaires in a standard fashion

#### Materials needed

- Questionnaires as follows:
  - School Data 1 –School
     Demographics (In School Packet)
  - School Data 1 -Teacher data (In School Packet)
  - School Data 2 Learner data (In School Packet)
  - Materials 1 School Materials
     Review (In School Packet)
  - Teacher Demographics 2 –
     Classroom Materials Form (In Teacher Packet)
  - Materials 2 Classroom Materials
     Form (In Teacher Packet)
  - Teacher Interview 1- Training and Support Questionnaire (In Teacher Packet)
  - Teacher Interview 2- Additional Questions Questionnaire (In Teacher Packet)
- Flip chart
- Pentel pens
- Manila paper for groups

#### Question and Answers (Q&A) (5 minutes)

**Conclusion:** Facilitator concludes introduction and transitions to first Activity (School Demographics Form), turning over to Timekeeper (2 minutes)

**Group Dynamics:** Timekeeper leads the "World Café" and asks participants to join a new group for the first introduction of the tools that will be used to collect school-based data. Time Keeper invites participants to Lunch and indicates to come back to new groups just established (3 minutes)

#### 1. SCHOOL DEMOGRAPHICS FORM Facilitator orients all participants (2 minutes)

#### **Activity 1: School Demographics Form (10 minutes):**

- Group leader shows the group the School Demographic Form and explains briefly.
  - O Why do we need school demographic information?
  - O What do you record in each cell?
  - What is the easiest way for the PEA to collect this information? Where can it be collected/where is it stored
- Let one or two participants in group articulate what goes in each cell of the form
- Participants raise any issues, allowing participants to identify any problems that might arise in the data collection itself.

#### 2. SCHOOL DATA 1: TEACHER DATA FORM Facilitator orients all participants (5 minutes)

#### Activity 1: School Data 1 Teacher data Form (10 minutes):

- Group leader shows the group the teacher data questionnaire and explains.
  - O What do you record in each cell?
  - What is the easiest way for the PEA to collect this information? Where can it be collected/where is it stored
- Let one or two participants in group articulate what goes in each cell of the form
- Participants raise any issues, allowing participants to identify any problems that might arise in the data collection itself.

#### 3. SCHOOL DATA 2: LEARNER DATA FORM Facilitator orients all participants (5 minutes)

#### Activity 2: School Data 2 Learner data forms (10 minutes)

- Group leader shows the group the Learner data questionnaire.
  - O What do you record in each cell?
  - What is the easiest way for the PEA to collect this information? Where can it be collected/where is it stored
- Let one or two participants in group articulate what goes in each cell of the form

• Participants raise any issues, allowing participants to identify any problems that might arise in the data collection itself.

**Debrief for Activity 1, 2, and 3:** Facilitator *invites participants to volunteer* key points of discussion from Activity 1-3 "Popcorn Style" (10 minutes)

**Conclusion for Activity 1, 2, and 3:** Facilitator closes these activities and transitions to School Materials Form. (2 minutes)

**Group Dynamics**: Participants stay in their own seats for Activity 4: School Materials Form (2 minutes)

**4. SCHOOL MATERIALS FORM** Facilitator tells participants they will stay in their same groups for Activity 4 and orients all participants to the School Materials Form **(5 minutes)** 

#### **Activity 4: School Materials Form (15 minutes)**

- Group leader shows the group the school materials data collection form
  - o Group leader demonstrates this task and what goes in every cell
  - Who can supply/provide the data and/or where can the records be found
  - What is the easiest way for the PEA to collect this information? Where can it be collected/where is it stored
  - O What do you record in each cell?
- Each participant in group demonstrates one example (syllabus, teacher guide, learner books, supplementary materials)
- Participants raise any issues, allowing participants to identify any problems that might arise in the data collection itself.

**Debrief for Activity 4:** Facilitator requests *specific group leaders* to share key points of discussions from Activity 4 (School Materials Form) (10 minutes)

**Conclusion for Activity 4:** Facilitator concludes Activity 4: School Materials Form and transitions to Teacher Data Collection, turning over to Timekeeper (2 minutes)

**Group Dynamics:** Timekeeper leads the World Café activity and informs participants that after moving to a new table to learn about data which is collected from the teacher, all will stay in same group for presentation of the next 4 data collection tools (2 minutes)

#### **GO TO NEXT PAGE**

#### **INTRODUCTION TO TEACHER DATA (5 minutes)**

Facilitator briefly orients participants to the five data collection tools that are to be collected from the teachers who will be observed teaching a lesson in the classroom (Inform participants that Classroom Observation will be presented in Section 4):

- Teacher Demographic Data Form
- Classroom Materials Form
- Classroom Observation Instrument
- Teacher Interview 1 Training and Support Questionnaire
- Teacher Interview 2 Additional Questions Questionnaire
- 5. TEACHER DEMOGRAPHIC FORM Facilitator introduces Teacher Demographic Form (2 minutes)

#### **Activity 5: Teacher Demographics Data Form (8 minutes)**

- Group leaders explain what data is to be collected, and reminds that this data is the demographics for the teachers that they observe teaching only
- Make sure participants are clear what information is recorded in each cell
- **6. CLASSROOM MATERIALS FORM** Facilitator introduces the Classroom Materials Form, reminding participants that this data is intended to be collected only from the classrooms that they observe **(5 min)**

#### **Activity 6: Classroom Materials Form (10 minutes)**

- Group leaders briefly describe the data that is needed to complete this form,
   reminding that it is only to be collected from the classrooms that they observe
- o Group leader demonstrates what information goes in each cell
- What is the easiest way for the PEA to collect this information? Where can it be collected/where is it stored?
- O What do you record in each cell?
- Let one or two participants in group articulate what goes in each cell of the form
- Participants raise any issues, allowing participants to identify any problems that might arise in the data collection itself

**Debrief on Activity 6:** Facilitator *invites participants to volunteer* any key points or issues related to the Demographics and Classroom Materials Forms "Popcorn Style" (8 minutes)

**Conclusion for Activity 6:** Facilitator concludes Activity 6: Classroom Materials Form Materials Form and Transitions to Teacher Interview 1 (Same Seats) (2 minutes)

#### **INTRODUCTION TO TEACHER INTERVIEWS (10 minutes)**

Facilitator tells participants they will stay in their same groups for Activity 7 and Activity 8 which focuses on training in the techniques of teacher interviews.

The facilitator refers back to the earlier presentation of validity and reliability.

The facilitator reminds participants and group leaders about the importance of obtaining valid and reliable measures and makes special reference to validity and reliability within the context of the teacher interviews.

- Valid The interviews need to generate information collected to be appropriate and accurate
- Reliable The interview process needs to be standard. For example, if two different PEAs
  interviewed the same teacher, they would get the same information.

The facilitator reminds PEAs that this is a special opportunity to contribute in the learning that is needed for improving on the support to teachers as they implement the NPC.

The facilitator informs PEAs that the information they collect from teachers will help the MOEST to understand how the teachers benefited from the NPC Orientation and other NPC related Continuous Professional Development and where they need further support.

TEACHER INTERVIEW 1: TRAINING AND SUPPORT QUESTIONNAIRE The facilitator briefly introduces participants to all of the pages of the Teacher Interview 1: Training and Support (5 minutes)

#### Activity 7: Teacher Interview 1 - Training and Support Questionnaire (20 minutes)

- The group leader reviews further the importance of collecting valid and reliable information and briefs participants on the Teacher Interview 1: Training and Support Questionnaire
- The group leader demonstrates how to collect and record data for every item on the questionnaire, facilitating discussion for each question one by one as he/she moves through the Training and Support Questionnaire
  - Participants are encouraged to discuss each item as the Group Leader takes him/her through the Questionnaire – focusing on the collection of valid and reliable data from the teachers that they are interviewing
  - Participant take turns demonstrating or explaining how to conduct one or more elements of the Training and Support Questionnaire
  - Participants role play selected sections of the Training and Support Questionnaire (group leader selects)
  - Participants raise any issues, allowing participants to identify any problems that might arise in the data collection itself

**Debrief on Activity 7:** Facilitator *invites participants to volunteer* key points of discussion from Activity 7 "Popcorn Style" **(10 minutes)** 

**Conclusion for Activity 7:** Facilitator concludes Activity and transitions to Teacher Data Collection, indicating that participants stay in same group (2 minutes)

**8. TEACHER INTERVIEW 2: ADDITIONAL QUESTIONS** The facilitator introduces Teacher Interview 2 – Additional Questions (2 min)

#### Activity 8: Teacher Interview 2: Additional Questions (15 minutes)

- For each question, the Group Leader facilitates a discussion among participants in the group.
  - Participants are encouraged to discuss each item as the Group Leader takes him/her through each Additional Question
  - o Pairs of PEAs role play each of the Additional Questions
  - Participants raise any issues, allowing participants to identify any problems that might arise in the data collection itself

**Debrief on Activity 8:** Facilitator *invites participants to volunteer* key points of discussion from Activity 7 and Activity "Popcorn Style" (10 minutes)

Conclusion – Facilitator briefly summarizes and transitions from SESSION 3 to SESSION 4 (2 minutes)

**Group Dynamics:** Timekeeper leads the "World Café" to transition to SECTION 4 (1 minute)

## SESSION 4: Administering Classroom Observation Instruments (2 Hrs, 30 min)

#### **General Introduction (10 Minutes)**

In this section we will focus on monitoring teacher performance through a structured classroom observation tool. Monitoring teacher performance through classroom observation methodologies is not easy and requires unique technical skills.

#### **Materials needed**

- NPC M&E
   Classroom
   Observation
   Instrument
- Pens
- Manila sheets of paper
- Projector

The NPC M&E Classroom Observation Instrument was designed to monitor the instructional practices of teachers according to the recommended "best practices" promoted by the principles of the NPC.

The NPC Classroom Observation Instrument was developed by Senior MOEST Officials from DIAS, Basic Education, Planning and MIE.

Through this learning activity – by carefully working through each item of the instrument - you will develop a deeper understanding of what the curriculum requires in terms of instructional practices and how classroom instructional practices performance can be measured objectively through observation.

In developing the skills of objective teacher observation your ability to support teachers in their day to day teaching practices will also be enhanced. When you have objective information on teacher practices in the classroom you are in a better position to tailor your support and supervision to the specific needs of the teachers you work with. You will also be able to track improvements in teacher instructional practices by repeated observations over time and learn how the support and supervision you have provided has impacted the schools and individual teachers you assist and support.

This instrument was developed and field tested last year. We anticipate that during this training we will, together, identify aspects of the instrument that could be improved. We welcome your input.

We will define your role in the Classroom Observation Instrument as the "Observer." However, of course you are also the "rater," "recorder," and "analyst!"

#### **Learning outcomes**

By the end of the topic participants will:

- Develop an applied understanding of the classroom observation instruments, their purpose, the
  information generated from classroom observation tools and the use of information. Develop
  the skills to administer the NPC Classroom Observation Schedule with a high level of inter-rater
  reliability Develop an applied understanding of the performance indicators that classroom
  observation instrument is design to measure
- Understand and agree on the information that each classroom observation item (teachers and learners) seeks to elicit
- Agree on the meaning of each rating for each observation item

#### INSTRUCTION FOR THE NPC CLASSROOM OBSERVATION INSTRUMENT

#### Orientation to the NPC Classroom Observation Instrument (20 minutes)

Facilitator introduces the NPC Classroom Observation Instrument and the basis for and mechanics of the rating scale.

Facilitator asks the participants to briefly look through the instrument. What are some things that you notice? Please volunteer your observations and raise your hand.

Highlight comments that address one of the following characteristics of the instrument.

Probe the participants further to make sure that these general characteristics of the Instrument are addressed in this introductory discussion.

- 1. Different sections on Essential Learner Behaviors and Essential Teacher Practices
  - Encourage audience to consider and discuss what the "Essential Learner Behaviors" are actually measuring
  - We want the participants to understand that the inclusion of the Learner Behaviors is NOT to evaluate learners.
  - o Rather it is another way of monitoring the instructional practices of teachers
  - o If teachers are applying the valued or "best" practices per the NPC and OBE recommended teaching methodologies, the teacher will stimulate the learners to participate actively.
  - Thus by observing learner behaviors in the classroom we learn about the effectiveness of the teachers' instructional method and skills
- 2. Each observation items represents a unique behavior that the observer is to evaluate and rate or "score" according to the specific requirements of the rating
- 3. Rating scale and definitions for each item. There is a clear description of how to rate or "score" each observation item
  - Rating from 1 4: Probe to see if the audience notices that the description for each rating is different from one observation item to another
  - Rating from 1 4: Probe to encourage audience to notice what is common in the rating scale from one observation item to another – assist participants to "discover" that a "1" is a low rating and a "4" is a high rating 6
- 4. Ratings where you have a "count" of desirable behaviors that are translated into the common 1-4 scale
  - Have the participants look at Item CO1.6. Ask them what is different about this item and what is similar to the other things.

#### Review the concepts of validity and reliability within the context of the Teacher Observation Instrument (20 minutes)

#### Validity

- As discussed in Session 2, we noted that sometimes the way the Questionnaire item is worded
  makes it difficult for the data collector to understand what they are supposed to observe, rate, and
  record. Classroom observation tools often present such challenges for the observer. This weakens
  the validity of the information collected.
- The observer may not know exactly what behavior he/she is supposed to be observing. For example, he/she may not know what is meant by "Supervision of Learning Activities" in Item CO2.5, for example.
- The rating scale itself may help to define the behavior that the item is calling for.
- However, the rating scale and how each rating is defined can also introduce another point of ambiguity or confusion. For example, the observer may have difficulty choosing between a rating of "1" or "2" or between a "3" and a "4."
- An instrument with strong validity has very little ambiguity and does not confuse the observer. The
  observer knows exactly what the behavior is that he/she is observing and knows exactly how to rate
  or "score" each item.

Invite audiences to give examples where an instrument may have strong or weak validity

#### Reliability

As we discussed in Session 2, when there is strong reliability - we expect that the data collected and recorded by different interviewers using the NPC Classroom Observation Instrument to be the same. We also expect the data collected and recorded to be the same when administered repeatedly by the same observer.

In order to achieve strong reliability we must have high levels of agreement among multiple administrators using the NPC Classroom Observation Instrument. It will be very important in this training to work together to achieve high inter-rater agreement. We have set up a number of activities to give you the practice you need to ensure that the data collected from the NPC Classroom Observation Instrument is valid and reliable.

**Debrief on Activity 8:** Facilitator *invites participants to volunteer* key points of discussion from the introductory materials (10 minutes)

**Conclusion** – Facilitator thanks participants for their participation and transitions to the activities. Participants – from Session 3 – have already moved to their table for this Session (2 minutes)

#### NPC Classroom Observation Instrument Activity: Walk through of each Observation Item

#### **Activity 1: Essential Learner Behaviors (15 minutes)**

- The group leader introduces the behavior to be observed and rating of each item in the instrument, probes group members and encourages their full participation, checking on their confidence each step of the way.
- The group leader provides opportunities for participants to describe what an item means and how it is to be rated
- The group leader may want to ask participants from time to time to describe the difference between on rating and another (e.g., clarify the difference between a rating of "1" and a rating of "2")
- For each item, the group leader must ensure that the group understands:
  - What is the item measuring
  - How is each item scored
- For each item, the group leader must ensure that the group understands Working with the group and for each item, the group leader should seek to clarify any ambiguity or scoring challenges identified by the PEAs.

**Debrief on Activity 1:** Facilitator *invites participants to volunteer* and share some of what they have learned in Activity 1 (10 minutes)

**Group Dynamics:** Timekeeper leads the "World Café" to transition to Activity 2 (3 minutes)

#### **Activity 2: Essential Teacher Practices (45 minutes)**

- The group leader introduces the behavior to be observed and rating of each item in the instrument, probes group members and encourages their full participation, checking on their confidence each step of the way.
- The group leader provides opportunities for participants to describe what an item means and how it is to be rated
- The group leader may want to ask participants from time to time to describe the difference between on rating and another (e.g., clarify the difference between a rating of "1" and a rating of "2")
- For each item, the group leader must ensure that the group understands:
  - What is the item measuring
  - How is each item scored
- For each item, the group leader must ensure that the group understands Working with the group and for each item, the group leader should seek to clarify any ambiguity or scoring challenges identified by the PEAs

**Debrief on Activity 2:** Facilitator *invites participants to volunteer* and share some of what they have *learned in Activity 2* (10 minutes)

**Conclusion**: Facilitator invites group leaders are invited to place their key concerns on paper and tape them to the wall for all to observe and transitions to SESSION 5 (5 minutes)

## SESSION 5: Scoring Video of Classroom Instruction and School Visit – Maximizing Inter-rater Agreement (4 Hours)

#### **General Introduction (10 Minutes)**

In this section we will be practicing the administration of the NPC Classroom Observation Instrument, addressing areas where observers are not sure how to score an item, and fine-tuning our observation skills.

Participants will work together in groups to sort out difficulties in rating which emerging during the "hands-on" practice in administering the instrument. Participants will have an opportunity to score two videotaped recording of teachers presenting a literacy lesson and will also be going to

**Materials needed** 

- Classroom Observation Instrument
- Video-tapes
- Flip Chart
- Pens
- Clipboards
- Manila sheets of paper
- Projector

schools to observe and practice administering the instrument in a real primary school classroom.

As discussed previously, high inter-rater reliability indicates that the majority of observers are in

agreement on the rating or "score" of a particular observation. An acceptable percentage of agreement is at least 75%. Low inter-rater agreement indicates that that when multiple pairs of observers rate the same activity there is little agreement on the ratings of one or more of the observation items. When there is low agreement then the ratings are difficult for observers to understand or "ambiguous." When raters cannot agree on a rating or score for an observation then the observation or definitions for the ratings need to be either clarified or modified.

When classroom observations yield high levels of inter-rater agreement we have confidence that the instrument overall or the individual items are *reliable*. We are confident that the observation items are *reliable* or "yield consistent ratings" among different observers. When any confusion about what it is the observers are supposed to looking for on a particular observation item is cleared up we also strengthen the *validity* of the instrument. Through this process we become confident that the instrument "measures what it is supposed to measuring" and the ratings are accurate.

#### Learning outcomes

At the end of the topic participants will be able to:-

- Administer the NPC Teacher Observation Instrument in a standard fashion
- Rate observations with acceptable levels of inter-rater agreement

**Conclusion:** Facilitator asks for questions and encourages participants themselves to answer. Transitions to the scoring of the 1<sup>st</sup> Video Tape Recording, Activity 1 (5 minutes)

**Group Dynamics**: The timekeeper explains the group dynamics for scoring the video tapes. Timekeeper introduces the Group Leaders for the Video activity by asking them to stand up at their tables. Participants are asked to organize themselves in groups of 10 by reporting to one of the 5 tables where the Video Group Leaders are representing. The participants are reminded that they will need sharpened pencils, their clipboards, and a copy of the Classroom Observation Instrument. The Group Leaders have the Classroom Observation Instruments for their group members. **(5 minutes)** 

**Introduction to Video Activity** The facilitator will orient the participants to the mechanics of the practice session and the group discussions. There will be independent scoring and then the groups will go through each item and resolve problems related to the observation items and ratings. Any unresolved problems should be written down and explained on the manila papers provided. Group leaders will keep a record of the distribution of ratings and will take notes on each item.

The facilitator will point out the items on the instrument that are for *either* literacy (Chichewa) or *numeracy* (Mathematics) and inform the remind participants that for these items they only rate the behaviors relevant to the lesson they are observing.

The facilitator will emphasize the importance of participants to speak up and openly discuss challenges in scoring or any other areas where the instrument and ratings are not clear. (10 minutes)

#### Video 1: Watch the Video Presented on Overhead Projector

#### **Introduction by Group Leaders**

**Prior to showing the video**, the group leaders are given an opportunity to orient their 10 group members (10 PEAs) to the Classroom Observation Instrument, instructing them in **(15 minutes)** 

- Ensuring interactions with teachers are courteous and respectful
- Their position in the class is as unimposing as possible
- Their responsibility in orienting teachers and ensuring them this is not a performance evaluation but it is the MOESTs first national monitoring exercise to determine exactly what kind of support and continuous professional development would be helpful in supporting teachers in implementing the NPC
- Reminds participants about how to rate each observation according to scale provided

#### Video 1 is played and all participants rate the video (1 Hour)

#### After the Video is played (45 min)

- The Group Leaders will go through each Observation Item and facilitate the discussion of the ratings, supporting team members in resolving areas of disagreement or noting changes that might be needed on the rating for a particular observation item
- The Group Leaders will calculate the inter-rater agreement for the initial set of ratings.
- Ratings and key comments for each group are held for plenary

**Video 1 Debrief:** Facilitator invites each group leader to share key findings, especially items where there was poor agreement, the reason for that, and the group's resolution (Approximately 5 minutes per group leader or 25 minutes altogether)

**Group Dynamics:** Everyone stays in their same place for observing the second video (5 min).

Video 2 is played and all participants rate the video (1 Hour)

**Conclusion:** Participants are informed in advance that they score the video and then hand in their forms. Facilitator thanks the participants for such hard work and invites them to afternoon tea to close.

#### SESSION 6: School Based Data Collection Practice (4 Hours, 45 Minutes)

#### Summary of Video Ratings (20 minutes)

The facilitator first shares results on inter-rater agreement from the second video, comparing the results to the first video.

The facilitator congratulates the PEAs in their strong scores and points classroom observation items that need further improvement to further improve the levels of agreement.

#### Introduction to School Based Data Collection (10 minutes)

The Facilitator now introduces the school-based data collection activity and facilitates the organization of the field activity.

#### Organization

- Form participants into groups of 2 (pairs). PEAs can pair up with anyone they would like.
- Distribute Clip Boards and the NPC Classroom Observation Instruments
- Discuss the protocol for entering the schools and classrooms

#### **PEAs Report to Schools (3 Hours)**

**Upon return join one of the 5 groups (after tea)** (If and while waiting, the pairs should go through each item. They should review and try to resolve disagreements.

Group Dynamics Timekeeper encourages PEAs to join one of five groups after tea (during tea)

#### After School Briefing (45 min)

- The five Group Leaders go through each Observation Item and facilitate the discussion of the ratings, supporting team members in resolving areas of disagreement or noting changes that might be needed on the rating for a particular observation item
- The Group Leaders will calculate the inter-rater agreement for the initial set of ratings.
- Ratings and key comments for each group are held for plenary

**School Experience 1 Debrief:** Facilitator invites each group leader to share key findings, especially items where there was poor agreement, the reason for that, and the group's resolution (Approximately 5 minutes per group leader or 25 minutes altogether)

**Conclusion** – The facilitator will summarize the key points emerging from School Visit and transition to Session 7 (5 minutes).

#### **Materials needed**

- Classroom
   Observation
   Instruments
- Transportation
- Flip Chart
- Pens
- Clipboards
- Manila sheets of paper
- Projector

#### SESSION 7: Procedures for the Implementation at the School (1 Hour)

#### Introduction (5 minutes)

It is important that certain school protocol is followed in the school and that the data collectors are courteous and professionals. Data collection procedure at school level requires orderly preparations in order to ensure that the activity is conducted in an orderly fashion according to standard procedures. In this Session you will introduced to the general procedures to be followed at the school.

#### **Materials needed**

- Proposed
   Schedule for
   School Activities
- Flip Chart
- Pens
- Clipboards
- Manila sheets of paper
- Projector

#### **Learning outcomes**

By the end of this unit, participants should be able to:

- Provide prior information about the data collection process to schools
- Identify all materials and instruments they will need for data collection
- Identify teachers and persons they will meet
- Develop a time schedule for data collection and briefing of SMC/PTAs, given the general framework

**SCHOOL PROCEDURE GUIDELINES** Facilitator introduces the proposed school schedule, but indicates that one of the purposes of the group activity will be to learn from the PEAs the viability of this schedule and to modify it according to the participants' inputs. **(10 minutes)** 

Group Dynamics: Timekeeper organizes the participants into groups of five (2 minutes)

#### **School Procedure Activity (20 minutes)**

- Group leader discusses the details of when and how to inform schools of the NPC M&E Data Collection Program
- Group leader facilitates a discussion about being professional, courteous, and organized during this activity
- Group leaders walk participants through the illustrative school procedures
- Participants will adapt the school procedures outline to his/her own context and develop a schedule tailor made to his/her needs.

**Debrief on Activity 7:** Facilitator *invites 2 participants to volunteer* in sharing the schedule they came up with (20 minutes)

**Conclusion:** The facilitator will provide summary of the main issues around data collection at school level which have been discussed. **(3 minutes)** 

## SESSION 8: Data Entry, Analysis and School Community Briefing (1 Hour, 20 Minutes)

#### **Introduction (10 Minutes)**

Participants will need to learn how to record the data and summarize the results from the various data collection instruments in order to brief the community on the 3<sup>rd</sup> day of the M&E data collection activity. In this session you will learn how to enter data on a summary sheet which will be used as your guide for debriefing the school and community.

Materials needed

- Data Summary Sheet
- Flip Chart
- Pens
- Manila sheets of paper
- Projector

In this session we will practice completing the Summary Sheet using real data from all of the instruments.

We will also discuss some of the dynamics of briefing communities on monitoring results. In so doing it is critical that the PEA correctly describes the nature of the activity as a National monitoring activity and differentiates this from a routine performance monitoring. We need to assure the stakeholders that the purpose of the activity is to learn about schools across the nation with a sample.

We do feel that it is also important for the school to learn what came out of the monitoring activity, but that the data gathered is not complete for the school (e.g., we did not observe all the teachers and collect information on all of the classrooms). It is just a sample.

The facilitator summarizes the main points in summarizing data collected at school level. The facilitator will note that it is very important that members of the field team should be very familiar with the process of summarizing collected data and putting the data in a presentable and logical form for easy presentation to the various stakeholders. This will help stakeholders to make meaningful contributions to the improvement in the implementation of the curriculum in the school.

#### **Learning Outcomes**

By the end of this session, participants should be able to:

- Enter data on a summary sheet
- Summarize data from the various data collection instruments
- Interpret data from summaries
- Communicate to the stakeholders the trend depicted by the data collected at the school

**SUMMARY AND COMMUNITY DEBRIEFING GUIDE** Facilitator introduces the Data Summary Sheet and briefly describes each element **(10 minutes)** 

Group Dynamics: Timekeeper organizes the participants into groups of five (2 minutes)

#### Activity 1: Data Summary Activity (20 minutes)

- Group leaders brief the participants on each aspect of the Summary Sheet
- Provide participants with mock set of data for all the instruments and a blank summary sheet
- Let participants complete the summary sheet based on the "mock" data provided from one set of instruments
- Ask participants to share any problems that they think might arise in completing the summary sheet

#### **Activity 2:** Briefing Guide (20 minutes)

- Group leaders describe the important steps in briefing the school and community
  - Start with self-introductions
  - Explain the purpose and importance of the exercise
  - Then highlight main areas on which briefing will be based
  - o Brief the stakeholders on each item using the summary sheet
  - Allow community to discuss each result after each general area: Materials, Teacher Training and Support; Classroom Observation Results
  - Express appreciation to the SMC/PTA for attending the meeting
- Using the summary sheets from Activity 1, participants will then role play the briefing with school and community based on the "mock" findings
- Ask participants to share any problems that they think might arise in debriefing the community

**Debrief on Activity 8:** Facilitator *invites 2 participants to volunteer* in sharing the schedule they came up with (15 minutes)

**Conclusion:** The facilitator will provide summary of the main issues around data collection at school level which have been discussed. (3 minutes)

#### **SESSION 9: Evaluation of the Training and Departure (20 Minutes)**

This is the first training on the NPC M&E Implementation Strategy and the Annual Data Collection exercise.

**Materials needed** 

- **Evaluation Forms**
- Pens

Projector

The training will be conducted on an annual basis and therefore it is important that the organizers learn how the participants benefited from the training and what can be done to improve it. We need to know if the learning outcomes listed in each section were achieved.

This helps the organizers to reflect on what changes they should incorporate to make the training more effective and more relevant.

We ask that you take special care in filling out the evaluation and provide as many additional comments as you see fit. We also welcome any suggestions you might have for improving the training.

Evaluation: 10 - 20 Minutes

Instructions provided for where and to whom forms are provided.

\_\_\_\_\_\_

**SESSION 10: Final Remarks** 

#### List of Participants, Zones and 100 Schools

SOUTH	PEA			
EASTERN EDUCATION				
DIVISION				
District	Name	Phone number	Zone	School
Zomba Urban	JamesKumbani	0888863066	Mponda	Zomba CCAP
Machinga	Maxon.	0999016093	Machinga Boma	Mwacheya
	Namaheya			
Machinga	Davis Simbani	0881889216	Chikweo	Nlingula
	Maxon Namaheya	0881135122	Machinga Boma	Chimwankhazi
	M.Jumbe	0884910551	Puteya	Madziamera
	Gladys Msathu		Mlomba	Katundu
	Flossy Chayenda		Nsanama	Maweha
	Bryson Kibulo	0888555329	Mpombe	Naming'azi
	Christopher Nkhoma	0888347376	Ntaja	Mgwiriza
Zomba Rural	Allipo.H. Ussi	0888504063	Mchengawedi	Mapalo
	Kester Kalera	0888860075	St. Martins	Mpanda
	Miles Kaliati	0888300797	Chimwalira	Utwe
	Miles Kaliati		Chimwalira	Chimwalira
	Kester Kalepa	0888860075	St. Martins	St. Martins
Mangochi	Bassanio Kachere	0888304237	Chimwala	Mpale
	Chauluka Muwake	0999923897	Masongola	Nakanyanja
Balaka	Elles Ndindi	0888599520	Balaka	Mchenga
	Andwatch Nkapa	0999365 982	M'manga	Ferry 18
SOUTH WEST EDUCATION DIVISION				
Blantyre City		0888 852 530	Chilomoni	Likhubula
	Ringford Chilambe	0888 868 676	Ndirande	Chitsime
	Mc Arthur Khumbanyiwa	0888 872 832	Limbe	Chichiri
	Victoria Ganiza	0888 861 130	Zingwangwa	Namasimba
	Christopher .W Taika	0888 516 793	Ndirande	Makata
Blantyre Rural	Peter Kwakwala	0888 515 329	Mdeka	Chinambiya
,	David Gubudu	0888 611 665	Naotcha	Naotcha
	Michael Kalulu	0884 430 177	Nankumba	Nansembe
	Rhoda Makwiti	0888 547 876	Lirangwe	Chigodi
Chikhwawa	Parks Stesha	0999 320 309	Ngabu	Chituwi
	Paison Kachingwe	0995 286 811	Kalambo	Lundu
	Emmie Ndadzela	0888 856 611	Boma	Chikhwawa RC

	Joyce Chadza	0999 412 641	Mapelera	Mapelera LEA
Mwanza	Wellingtone	0999 020 294	Thambani	Kaponyatola
	Khuvula			
Neno	Joyce Kachale	0888 850 565	Nsambe	Mankhamba/Mlindi
Nsanje	Mc Elec.	0888 699 670	Fatima	Sankhulani
	Nkhambala			16

SHIRE HIGHLANDS EDUCATION DIVISION			ZONE	SCHOOL
Mulanje	Ann Khoropa	0888 642 495	Ulongwe	Ngolowera
	Rosemary	0888 624 808	Masubi	Namikhate
	Mnyaka			
	Snowden	0881 207 844	Chambe	Pasani
	Mateyu			
	Snowden Mateyu		Chambe	Samsoni
	Snowden		Chambe	Mkanda
	Mateyu			
Phalombe	Gray E. Gonjani	0888 599 954	Khongoni	Malambwe
	Diverson D.	0995 841 926	Nkhulambe	Nkhulambe
	Gwedeza			
	Abdul Gama	0888 580 502	Swang'oma	Nambazo
Thyolo	Getrude Ndunya	0888 347 441	Chisawani	Chiriza
	Biston Gama	0999 272 286	Nansato	Nankhulumbo
	Fellie Chakukuma	0888 030 365	Mpinji	Mpinji
	Mercy Matope	0888 105 632	Goliati	January
	Aemon Chimwala	0888 522 649	Luchemza	Luchenza
	Baston Saphwani	0999 356 340	Thunga	Chinthebe
Chiradzulu	Franklin A.	0888 647 425	Namitambo	Mulinde
	Chibweya			
	Moses Kalawira		Ndunde	Nankhundi
	Agnes Mbewe	0884 404 941	Litchenza	Namadidi
				17
NORTHERN				
EDUCATION				
DIVISION				
Karonga	Edwin	0888 370 650	Majaliro	Ponda
	Mwampangire			
	Hamilton	0888 377 775	Ipyana	St. Mary's Girls
	Nyasulu			

	Hamilton		Ipyana	Karonga CCAP
	Nyasulu			
	Edgar J. Jabu	0999 352 785	Hangalawe	Chankholombe
Rumphi	Kajintih	0884 379 967	Luviri	Nkhozo
	Mkandawire			
	Stainings Harawa	0884 398 182	Bolero	Chinyoli
Mzuzu city	Colby Ngwira	0888 371 236	Masasa	Msongwe
	Stela Nyirenda	0888 680	Zolozolo	Chiputula
		918*		
Nkhata Bay	Anjax Kondowe	0993 698 525	Chihame II	Kawalazi
	Isaac Kaunda	0991 268 123	Kavuzi	Mdezu
	Elsen Mwase	0995 406 809	Ching'oma	Sanga
Mzimba North	Precious Kaunda	0888 386 305	Mzangalawe	Kavululanga
	Christopher	0881 496 985	Bulala	Bolomombwe
	Salanga			
	Stephen Ng'andu	0991 145 903	Euthini	Mzambazi
	Griffin Myaba	0881 888 344	Kapando	Kwabwafu
Mzimba South	Oscar Phiri	0888 645 757	Unyolo	Chizani
	Triemore	0888 382 648	Edingeni	Kaka
	Luhanga			
	Stella Nyirenda	0881 211 153	Ephangweni	Mbawa
	Speke Chiumia	0884 554 950	Mabiri	Mhlafuta
				19
CENTRAL WESTERN				
EDUCATIONAL				
DIVISION	0.00	0000 100 016		A
Dedza	Symon Chizuzu	0999 129 016	Tchetsa	Ntcheu
1.1	Fatima Kudza	0999 119 101	Chitundu	Thombozi
Lilongwe City	Edna Kaludzu	0888 879 609	Chiwoko	Kamuzu barracks
5	Robbins Mumba	0999 445 192	Chiwoko	Kaliyeka
Lilongwe Rural	H. Matchona .	0999 121 468	Majiga	Kambudzi
	Banda	0000 470 075	Children	Chile
	Clemens	0999 479 875	Chikhutu	Chibwata
	Chinchenga	0000 412 025	Dischini	Malama
	Michael Majiri	0999 413 935	Pimbiri	Malama
	Gabriella Paliani	0888 550 747	Mzumazi	Chagamba
	Fayison Phiri	0999 110 853	Malembo	Kazumba
	Eddy Mtimuni	0999 613 042	Ching'ombe	Mnjolo
Ntchou	Ophen Banda Alexis Joabe	0999 282 716	Likuni	Ngowe
Ntcheu	Alexis Joane	0888 394 895	Kapalamula	Kansapato 12
CENTRAL EASTERN				
EDUCATIONAL				
DIVISION				
Dowa	Harrold J	0999 125 696	Katalima	Bweya
	Kamanga			

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	Morgan Mwale	0999 335 502	Kapita	Kapita
	Inocentia	0991 829 382	Dzoole	Chibweza
	Chantonda			
	Steven	0 888 877 111	Kabwinja	Kaphiri
	Chinangwa			
	Selina Magola	0888646426*	Chibwata	Umozi Katubzi
Kasungu	Beatrice S Chisi	0992 793 800	Wimbe	Guchi
	Elizabeth	0888 356 069	Boma	Kamwala
	Kazombo			
	Mervin Munthali	0999 702 575	Chulu	Chisuwe
	Fred Mwale	0992 124 041	Kalolo	LKalolo
	Cosmas	0999 462 116	Zyalambe	Zyalambe
	chimangeni			
	Marcel Chirwa	0884 535 553	Chamama	Chidaola
	Isaac Mc Phiri	0999 404 222	Chankhanga	Chankhanga urban
Nkhotakota	James	0999 448 403	Mkaika	Chinkhwamba
	Mankhangala			
	Patrick Msoliza	0999 256 885	Kanyenda	Kaongozi
	Lem Mtekateka	0999 438 972	Boma	Nkhota kota
Ntchisi	Mc Pherson Phiri		Chikho	Nandzombe
	Mc Pherson Phiri		Chikho	Chadzimbobo
Salima	John Kavalo Phiri	0999 370 677	Katerera	Mthunthama
				18